



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/317,409	05/24/1999	SCOTT D. LUCAS	1590.3039	9060

8015 7590 02/01/2006

CYTEC INDUSTRIES INC.
1937 WEST MAIN STREET
P.O. BOX 60
STAMFORD, CT 06904-0060

EXAMINER

BEFUMO, JENNA LEIGH

ART UNIT	PAPER NUMBER
----------	--------------

1771

DATE MAILED: 02/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/317,409	LUCAS ET AL.	
	Examiner	Art Unit	
	Jenna-Leigh Befumo	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12,39-46,55,57-76 and 87-89 is/are pending in the application.
- 4a) Of the above claim(s) 1-12,39-46,60-76 and 87 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 55,57-59,88 and 89 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The Amendment submitted on December 12, 2005, has been entered. Claims 13 – 38, 47 – 54, 56, and 77 – 86 have been cancelled. Claims 55, 88, and 89 have been amended.

Therefore, the pending claims are 1 – 12, 39 – 46, 55, 57 – 76, and 87 – 89. Claims 1 – 12, 39 – 46, 60 – 76, and 87 are withdrawn from consideration as being drawn to a nonelected invention.

2. The 35 USC 112 1st paragraph rejection of claim 89 is withdrawn since the claim has been amended to remove the language which excluded the stiffness treated prepreg ply from being in contact with the honeycomb core.

3. The amendment to claims 55 and 88 is sufficient to overcome the 35 USC 102/103 rejection based on Corbett et al. (5,895,699) since Corbett et al. fails to teach placing a prepreg layer in a position contacting the honeycomb core or between the stiffness-treated prepreg ply and the honeycomb core. However, a new rejection is set forth below.

Claim Rejections - 35 USC § 102/103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 55, 57 – 59, 88, and 89 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kain, Jr. (6,180,206).

Kain, Jr. discloses a honeycomb composite comprising a prepreg ply adjacent the honeycomb core to reduce core crush problems (column 3, lines 19 – 23). Further, Kain, Jr. discloses that known honeycomb composite structures comprising outer face prepreg skins, a honeycomb core, a barrier film, a film adhesive layer, and a scrim-supported film adhesive layer

Art Unit: 1771

wherein the barrier layer and the film layers are between the honeycomb core and prepreg skin layers (column 4, lines 17 – 60). These structures have increased slippage between the barrier film and the honeycomb core resulting in increased core crush problems (column 4, lines 60 – 68). Kain, Jr. discloses that his invention includes a prepreg ply, such as woven fiberglass fabric impregnated with epoxy directly adjacent to both sides of the honeycomb core (column 7, lines 43 – 68). This layer is a full prepreg layer which covers the entire surface of the core (column 8, lines 35 – 40). Thus, Kain, Jr. discloses the honeycomb core with prepreg plies directly contacting the honeycomb core. The composite structure also includes an outer laminate layer of fiber-reinforced matrix resin, adjacent to a barrier film adhesive, which is adjacent to the prepreg ply contacting the honeycomb core (claim 3). Thus, the outer laminate layer of a fiber-reinforced matrix resin and the barrier adhesive correspond to the applicant's stiffness treated fabric comprising the plurality of fibers, polymeric material, and resin system.

Although Kain, Jr. does not explicitly teach the limitations of stiffness value of the prepreg layers or the frictional resistance of the prepreg layers, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. prepregs made from fabrics including a polymeric material disposed on at least some of the fibers and a second resin system) used to produce a prepreg layer in honeycomb composite structure. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, the claimed frictional resistance would obviously have been provided by the process disclosed by Kain, Jr. Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the

Art Unit: 1771

rejection made above under 35 USC 102. Therefore, claims 55, 57 – 59, 88, and 89 are rejected by Kain, Jr.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following references disclose modifying the resin content of a prepreg ply to improve the tackiness of the prepreg layer with respect to the adjacent layer: Goodrich et al. (4,213,930); Ozaki et al. (6,027,794); and Kishi et al. (6,429,157).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna-Leigh Befumo whose telephone number is (571) 272-1472. The examiner can normally be reached on Monday - Friday (8:00 - 5:30).

Art Unit: 1771

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jenna-Leigh Befumo
January 26, 2006